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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,980	02/25/2004	Hitan S. Kamdar	GP-304500 (2760/163)	4514
General Motors Corporation 300 Renaissance Center Legal Staff, Mail Code 482-C23-B21 P.O. Box 300 Detroit, MI 48265-3000		EXAMINER		
			LE, JOHN H	
		6	ART UNIT	PAPER NUMBER
			2863	-
			DATE MAILED: 04/13/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

<u> 3</u>

Application No.    10/786,980   KAMDAR ET AL.	S,					
Office Action Summary  Examiner  John H. Le  2863  The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed	 					
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- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication is reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).	on.					
Status						
1)⊠ Responsive to communication(s) filed on 10 February 2006.						
2a) This action is <b>FINAL</b> . 2b) This action is non-final.						
☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merit						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-5,7-14 and 16-19</u> is/are pending in the application.						
4) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1-5,7-14 and 16-19 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on <u>25 February 2004</u> is/are: a) ⊠ accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121	(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 02/28/2006.  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152) 6) Other:						

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# Response to Amendment

1. This office action is in response to applicant's amendment received on 02/10/2006.

Claims 1, 10, and 19 have been amended.

Claims 6 and 15 have been cancelled.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-5, 7-14, 16-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 1, it appears to be an abstract idea rather than a practical application of the idea. The diagnostic data is collected, but there is no final step of using the diagnostic data in any way or making the diagnostic data available for use in a meaningful way (e.g., in some instances, if it was conveyed to someone or something or stored for retrieval, that would establish a tangible result). Thus, the claim appears to lack a tangible result.

Regarding claim 10, it appears to be an abstract idea rather than a practical application of the idea. The diagnostic data is collected, but there is no hardware using the diagnostic data in any way or making the diagnostic data available for use in a meaningful way (e.g., in some instances, if it was conveyed to someone or something or stored for retrieval, that would establish a tangible result). Thus, the claim appears to lack a tangible result.

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Regarding claim 19, it appears to be an abstract idea rather than a practical application of the idea. The diagnostic data is collected, but there is no device using the diagnostic data in any way or making the diagnostic data available for use in a meaningful way (e.g., in some instances, if it was conveyed to someone or something or stored for retrieval, that would establish a tangible result). Thus, the claim appears to lack a tangible result.

Claims 2-5, 7-9 and 11-14, 16-18 are rejected under 35 U.S.C. 101 base on dependency.

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marko et al. (USP 6,745151) in view of Sonnenrein et al. (US 2005/0154500 A1) and Shirane et al. (USP 5,491,631).

Regarding claims 1, 10, and 19, Marko et al. teach a computer readable medium storing a computer program (13, Fig.1) comprising: computer readable code for providing the primary diagnostic script to the mobile vehicle (e.g. Col.3, lines 27-40, Col.7, lines 55-61); computer readable code for executing the primary diagnostic script (e.g. Col.3, lines 27-40, Col.7, lines 55-61); and computer readable code for collecting

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diagnostic data based on the executed primary diagnostic script (e.g. Col.3, lines 27-40, Col.7, line 66-Col.8, line 11).

Marko et al. fail to teach configuring a primary diagnostic script for a telematics equipped mobile vehicle, wherein the primary diagnostic script recreates known problem sequences when executed.

Sonnenrein et al. teach configuring a primary diagnostic script (configuration scripts [0031]) for a telematics equipped mobile vehicle (e.g. [0033], [0035]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include configuring a primary diagnostic script for a telematics equipped mobile vehicle as taught by Sonnenrein et al. in a diagnostic/prognostic system monitors performance of a vehicle of Marko et al. for the purpose of providing telematics terminals with a suitable access and are already present in the vehicle to be used for performing vehicle-related telematics applications (Sonnenrein et al., [0003]).

Shirane et al. teach the primary diagnostic script (fault diagnostic program) recreates known problem sequences when executed (fault diagnosis can be made)(e.g. Col.10, lines50-Col.11, line 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include inform the diagnostic script recreates known problem sequences when executed as taught by Shirane et al. in a diagnostic/prognostic system monitors performance of a vehicle of Marko et al. in view of Sonnenrein et al. for the purpose of providing a fault diagnostic system for a vehicle which can provide fault diagnosis and classification with high accuracy oil the basis of data such as engine type

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and engine specification required for identifying a vehicle, and which can find a true faulty portion in a short time without requiring any special knowledge or experience (Shirane et al., Col.5, lines 41-49).

Regarding claims 2, 11, Marko et al. teach computer readable code for analyzing the collected diagnostic data (e.g. 55, Figs.3-4, Col.7, lines 17-31).

Regarding claims 3, 12, Marko et al. teach computer readable code for initiating the automated vehicle diagnostic function (e.g. Col.8, lines 2-8).

Regarding claims 4, 13, Marko et al. teach the computer readable code for initiating the automated vehicle diagnostic function comprises: computer readable code for receiving a request for automated vehicle diagnostic function from a user interface (technician); and computer readable code for identifying diagnostic routines based on the received request (e.g. Co.3, lines 52-60).

Regarding claims 5, 14, Marko et al. teach the computer readable code for configuring the primary diagnostic script comprises: computer readable code for determining at least one diagnostic script based on diagnostic options (e.g. Col.7, line 66-Col.8, line 2); and computer readable code for retrieving the at least one diagnostic script (e.g. Col.6, lines 49-57), wherein the one or more diagnostic scripts are combined into the primary diagnostic script (e.g. Col.8, lines 26-30).

Regarding claims 7, 16, Marko et al. teach the primary diagnostic script triggers data capture when specific conditions exist (e.g. 55, Figs.3-4, Col.7, lines 8-46).

Regarding claims 8, 17, Marko et al. teach the computer readable code for collecting diagnostic data based on the executed primary diagnostic script comprises:

computer readable code for receiving diagnostic data from vehicle system modules (e.g. Col.2, lines 47-49); and computer readable code for storing the received diagnostic data (e.g. Col.4, lines 33-53, Col.6, lines 38-48).

Regarding claims 9, 18, Marko et al. teach the diagnostic data is selected from the group consisting of: diagnostic trouble codes (e.g. Col.2, lines 42-47, Col.6, lines 38-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include inform the diagnostic script recreates known problem sequences when executed as taught by Shirane et al. in a diagnostic/prognostic system monitors performance of a vehicle of Marko et al. in view of Sonnenrein et al. for the purpose of providing a fault diagnostic system for a vehicle which can provide fault diagnosis and classification with high accuracy oil the basis of data such as engine type and engine specification required for identifying a vehicle, and which can find a true faulty portion in a short time without requiring any special knowledge or experience (Shirane et al., Col.5, lines 41-49).

## Response to Arguments

6. Applicant's arguments filed 09/08/2005 have been fully considered but they are not persuasive.

-Applicant argues that the prior did not teach "the primary diagnostic script recreates known problem sequences when executed" as cited in claims 1, 10, and 19.

Examiner position is that Shirane et al. teach the primary diagnostic script recreates known problem sequences when executed as discussed above.

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### Conclusion

7. Specifically Shirane et al. has been added to the other ground of rejection.

#### Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H. Le whose telephone number is 571 272 2275. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571 272 2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John H. Le

Patent Examiner-Group 2863

April 4, 2006

John Barlow ervisory Patent Examiner chnology Center 2800

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